

## CLAIMS

1. A scalable processing system, comprising:
  - a memory device that includes a plurality of executable program instructions, wherein each of said executable program instructions includes a timetag data field indicative of the nominal sequential order of said associated executable program instructions; and
  - a plurality of processing elements, which are configured and arranged to receive executable program instructions from said memory device, wherein each of said processing elements executes executable instructions having the highest priority as indicated by the state of said timetag data field.